A world leader in industrial drying technology, combining over one hundred years of drying experience
Welcome to GEA Barr-Rosin

GEA Barr-Rosin is a leading supplier of industrial drying systems and offers numerous systems and technologies for drying wet materials such as granules, cakes, sludges, powders and slurries.

Innovation, flexibility and a depth of process experience allow us to offer a wide range of drying technologies for plant design. We custom design our systems, based on our proven technology and Plant testing/Research and Development, to meet our customers’ requirements.

GEA Barr-Rosin’s Vision & Values
- Excellence
- Passion
- Integrity
- Responsibility
- Diversity

With over 2500 references worldwide and based on innovation, flexibility and depth of process experience GEA Barr-Rosin drives for excellence. To maintain our leading position we continue to focus on product quality, system reliability, energy savings and emission control.
Drying, Cooling and Calcining

www.barr-rosin.com
Flash and Ring Dryers

These are designed for products that dry rapidly, owing to the easy removal of free moisture, or where any required diffusion to the surface occurs readily. Drying applications include: sludges, filter cakes, slurries, crystals, granules and pastes, in fact, almost any application requiring a powdered product can be Flash/Ring dried. Wet material is introduced into a stream of heated air where it dries rapidly due to the high rates of heat and mass transfer, whilst being conveyed through the drying duct system.

Ring dryers incorporate a centrifugal classifier giving selective internal recirculation of semi-dried solids effectively lengthening the retention time of larger particles in the dryer while finer material, which dries more rapidly, exits the dryer with the exhaust air.
Fluidised Bed Dryers and Coolers

These are used for the controlled removal of surface and bound moisture in powder, crystalline and granular materials. They work by gently drying or cooling over extended residence times.

Hot or cold air is passed up through a perforated distributor plate at a velocity required to fluidize the material, that is, to take on the characteristics of a bubbling liquid.

The gentle but intimate contact of drying/cooling gas with the product ensures minimal attrition and dust creation.

Configurations available include:

- Vibrating
- Stirred
- Deep Fluidised Beds
- Embedded Tubes
- Integral drying/cooling
- multiple stages

All as required by product and application.
Combining flexibility with reliability, this type of dryer handles a vast range of materials and is suited to the most arduous conditions.

The design also permits the use of the highest possible drying temperatures and is not sensitive to wide variations in material size, moisture content or throughput.

As the dryer rotates, material cascades through a hot gas stream, using a series of peripheral flights to lift, distribute and transport the material. The flights are designed to suit the particular characteristics of the material, which may vary with increasing dryness.

Other systems include Direct and Indirect Rotary Coolers, Direct Fired Rotary Calciners and Indirectly Heated Rotary Dryers and Calciners for fine and dusty materials and lower temperature calcining applications.
Column Dryers and Coolers

These are designed for drying free-flowing materials such as amorphous or crystalline powders and granules to very low levels of residual moisture or volatile content. With long residence times obtainable, columns are frequently used for diffusion-controlled processes.

The column is designed for plugflow and incorporates a special gas distribution cone to ensure uniform counter-current gas flow up through the material.

Residence time can vary from 1 to 24 hours, depending on the required diffusion rate of moisture through the material.

Column Coolers transfer 90-100% of heat to cooling water flowing through tubes suspended across the column of slowly moving hot material.

The column is designed as a mass flow vessel giving uniform residence time and even providing cooling to all the solids.
Pilot Plant
Comprehensive testing of client’s materials

At GEA Barr-Rosin we have extensive pilot plant facilities, located in the UK and Canada. This enables comprehensive testing of clients’ materials on our full range of equipment.

A well-equipped laboratory is also located on each site to provide rapid analysis of moisture contents, bulk density and particle size distribution. We use local laboratories for more specialist analyses.

In addition to the equipment available in our test facilities, some is available for hire for on-site testing.

Information is available on request.
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GEA Barr-Rosin is part of the Process Engineering segment of the GEA Group.
We live our values.
Excellence • Passion • Integrity • Responsibility • GEA-versity

GEA is a global technology company with multi-billion euro sales operations in more than 50 countries. Founded in 1881 the company is one of the largest providers of innovative equipment and process technology. GEA is listed in the STOXX® Europe 600 Index. In addition, the company is included in selected MSCI Global Sustainability Indexes.

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